

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-2 (canceled)

Claim 3 (currently amended): An expression vector comprising ~~the isolated polynucleotide according to Claim 1~~ a polynucleotide encoding a polypeptide comprising a first conserved domain that is at least 78% identical to SEQ ID NO: 84 and a second conserved domain that is at least 63% identical to SEQ ID NO: 92.

Claim 4 (currently amended): A cultured host plant cell transformed with the ~~isolated polynucleotide expression vector~~ according to Claim ~~[[2]]~~ 3, wherein a plant grown from said cultured host plant cell exhibits greater biomass as compared to a control plant.

Claim 5 (currently amended): A transgenic plant comprising the ~~isolated polynucleotide expression vector~~ according to Claim ~~[[1]]~~ 3.

Claim 6 (currently amended): A transgenic plant comprising a recombinant polynucleotide encoding a polypeptide having an AT-hook domain, wherein:

the polypeptide is overexpressed relative to a wild-type plant;

the AT-hook domain is sufficiently homologous to the AT-hook domain of SEQ ID NO: ~~[[2]]~~ 14 that the polypeptide binds to the narrow minor groove of AT-rich regions of DNA and regulates transcription; and

the polypeptide comprises a first conserved domain that is at least 78% identical to SEQ ID NO: 84 and a second conserved domain that is at least 63% identical to SEQ ID NO: 92;

~~said polypeptide has the property of SEQ ID NO: 2 of regulating abiotic stress tolerance or increasing biomass in a plant; and~~

~~wherein said binding to said DNA confers an altered trait of increased biomass or increased abiotic stress tolerance in said transgenic plant, as compared to a non-transformed plant that does not overexpress the polypeptide.~~

Claim 7 (currently amended): The transgenic plant of Claim 6, wherein ~~said polypeptide comprises an~~ the AT-hook domain that is at least 78% identical to the AT-hook domain of SEQ ID NO: [[2]] 84, and [[a]] the second conserved domain is at least [[62%]] 71% identical to the second conserved domain of SEQ ID NO: [[2]] 92.

Claim 8 (currently amended): The transgenic plant of Claim 6, wherein ~~said recombinant polynucleotide sequence comprises a nucleotide sequence that hybridizes over its full length to the complement of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 9, SEQ ID NO: 11, SEQ ID NO: 13, SEQ ID NO: 15 or SEQ ID NO: 17 under stringent comprising two wash steps of 6x SSC and 65° C for 10-30 minutes~~ the AT-hook domain is at least 89% identical to SEQ ID NO: 84 and the second conserved domain is at least 67% identical to SEQ ID NO: 92.

Claim 9 (currently amended): The transgenic plant of Claim 6, wherein said polypeptide is ~~selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, SEQ ID NO: 16 and SEQ ID NO: 18.~~

Claim 10 (currently amended): The transgenic plant of Claim 6, wherein ~~said transgenic plant is characterized by altered sugar sensing~~ the polypeptide has the property of SEQ ID NO: 14 of increasing biomass of a plant, and wherein said binding to said DNA confers increased biomass of the transgenic plant as compared to a non-transformed plant that does not overexpress the recombinant polynucleotide.

Claims 11-12 (canceled)

Claim 13 (currently amended): The transgenic plant of Claim 6, ~~further comprising wherein the recombinant polynucleotide comprises~~ a constitutive, inducible, or tissue-specific promoter operably linked to said polynucleotide sequence.

Claims 14-17 (canceled)

Claim 18 (currently amended): A method for producing a transgenic plant having increased biomass as compared to a control plant, the method steps comprising:

(a) providing an expression vector comprising:

(i) a polynucleotide sequence comprising a nucleotide sequence that ~~hybridizes over its full length to the complement of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 9, SEQ ID NO: 11, SEQ ID NO: 13, SEQ ID NO: 15 or SEQ ID NO: 17 under stringent conditions comprising two wash steps of 6x SSC and 65° C for 10-30 minutes~~ encodes a polypeptide having an AT-hook domain that is at least 78% identical to the AT-hook domain of SEQ ID NO: 84 and a second conserved domain at least 63% identical to SEQ ID NO: 92; and

(ii) one or more regulatory elements flanking the polynucleotide sequence, said one or more regulatory elements ~~being effective to control~~ controlling expression of said polynucleotide sequence in ~~a target~~ the transgenic plant;

(b) introducing the expression vector into a plant cell, and allowing the plant cell to overexpress ~~[[a]] the polypeptide encoded by the recombinant polynucleotide, said polypeptide having the property of increasing biomass in a transformed plant as compared to a non-transformed plant that does not overexpress the polypeptide~~ the control plant; and

(c) growing the plant cell into a plant; ~~and~~

~~(d) identifying one or more plants with increased biomass so produced by comparing said plant with increased biomass with one or more non-transformed plants that do not overexpress the polypeptide.~~

Claim 19 (currently amended): The method of Claim 18, the method steps further comprising:

~~(e) (d) selfing or crossing one of said transgenic plant with increased biomass with itself or another plant, respectively, to produce transgenic seed; and~~

~~(e) (e) growing a progeny plant from the transgenic seed, thus producing a transgenic progeny plant having increased tolerance to abiotic stress~~ biomass as compared to the control plant.

Claim 20 (currently amended): The method of Claim 19, wherein:

said progeny plant expresses mRNA that encodes a DNA-binding protein having an AT-hook domain that binds to a DNA molecule, regulates expression of said DNA molecule, and induces expression of a plant trait gene; and

said mRNA is expressed at a level greater than ~~a non-transformed plant that does not overexpress said DNA-binding protein~~ in the control plant.

Claim 21 (currently amended): The method of Claim 18, wherein said transgenic ~~plants are plant~~

is selected from the group consisting of tomato, soybean and rice, ~~and said polypeptide is selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14, SEQ ID NO: 16 and SEQ ID NO: 18.~~

Claim 22 (new): The method of Claim 18, wherein the AT-hook domain is at least 78% identical to SEQ ID NO: 84, and the second conserved domain is at least 71% identical to SEQ ID NO: 92.

Claim 23 (new): The method of Claim 18, wherein the AT-hook domain is at least 89% identical to SEQ ID NO: 84 and the second conserved domain is at least 67% identical to SEQ ID NO: 92.

Claim 24 (new): A transgenic seed comprising the expression vector of Claim 1.

Claim 25 (new): A transgenic seed produced by the transgenic plant of Claim 6.

Claim 26 (new): A transgenic seed produced by the transgenic plant produced by the method of Claim 18.